What is claimed is:

1. A caching system for identifying memory component identifiers associated with data in a storage device, comprising:

   means for creating a cache of said memory component identifiers, wherein said memory component identifiers comprise identifiers that are invalid; and

   means for managing said cache of memory component identifiers.

2. The caching system of claim 1, wherein said memory component identifiers further comprise one or more of the following:

   identifiers that are moved from a first storage location to a second storage location;

   identifiers that are deleted;

   identifiers that are dynamic;

   identifiers that are renamed; and

   identifiers selected by a user.

3. The caching system of claim 1, wherein said memory component identifiers further comprise identifiers that are valid.

4. The caching system of claim 1, wherein said storage device is a data processing system comprising:

   a disk drive including a disk in which is stored a tree structure of data located in directories and files; and

   a main memory for storing data, said data stored in said memory being accessible at a rate substantially faster than the rate at which data stored on a disk can be accessed.

5. The caching system of claim 4, wherein said means for creating said cache comprises:

   creating in said main memory a first name cache;

   in response to an initial request to open a specified file nested in a path of one or more directories, accessing said disk and determining that directory entries and file entries do not contain said specified file;

   storing in said first name cache a history of paths of said directory entries

and said file entries that do not contain said specified file;

in response to a subsequent request to open said specified file, searching through said history of said first name cache to locate said directory entries and said file entries that do not contain said specified file; and

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returning a response that said specified file is not contained on said disk.

6. The caching system of claim 1, further comprising:

means for updating said cache by removing a least recently used memory component identifier in accordance with a least recently used routine.

7. The caching system of claim 1, further comprising:

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means for updating said cache by adding a most recently used memory component identifier in accordance with a most recently used routine.

8. The caching system of claim 1, further comprising:

means for updating said cache by adding a most frequently searched memory component identifier in accordance with a most frequently searched
15 routine.

9. The caching system of claim 1, further comprising:

means for updating said cache by removing a least frequently searched memory component identifier in accordance with a least frequently searched routine.

20 10. The caching system of claim 1, further comprising:

means for updating said cache by updating said memory component identifier in accordance with a user specified routine.

11. The caching system of claim 1, wherein said cache is one of a negative cache of memory component identifiers that are not associated with data in said storage device.

25 12. The caching system of claim 11, wherein said negative cache comprises a predetermined number of cache entries for storing a history of said memory component identifiers that are not associated with data in said storage device.

13. The caching system of claim 12, wherein said predetermined number of cache entries is based on usage of said memory component identifier.

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14. The caching system of claim 11, wherein said negative cache comprises a percentage of cache entries stored in a cache system of valid memory component identifiers.

15. The system of claim 14, wherein said negative cache is used for storing a history of said memory component identifiers that are not associated with data in said storage device.

16. The caching system of claim 11, wherein the cache is further comprises a positive cache of memory component identifiers that have been written to at least one storage device.

17. The caching system of claim 1, further comprising:

    means for determining if at least one memory component identifier has been accessed by at least one of a plurality of computer processes.

18. The caching system of claim 17, further comprising:

    means for increasing the number of said memory component identifiers to be placed into said cache if at least one memory component identifier has been accessed by at least one of said plurality of computer processes.

19. The caching system of claim 17, further comprising:

    means for decreasing the number of said memory component identifiers to be placed into said cache if at least one memory component identifier has been accessed by at least one of said plurality of computer processes.

20. A caching method for identifying memory component identifiers associated with data in a storage device, comprising:

    creating a cache of said memory component identifiers, wherein said memory component identifiers comprise identifiers that are invalid; and

    managing said cache of memory component identifiers.

21. The caching method of claim 20, wherein said memory component identifiers further comprise one or more of the following:

    identifiers that are moved from a first storage location to a second storage location;

    identifiers that are deleted;

    identifiers that are dynamic;

    identifiers that are renamed; and

identifiers selected by a user.

22. The caching method of claim 20, wherein said memory component identifiers further comprise identifiers that are valid.

23. The caching method of claim 20, wherein said storage device is a data processing system comprising:

a disk drive including a disk in which is stored a tree structure of data located in directories and files; and

a main memory for storing data, said data stored in said memory being accessible at a rate substantially faster than the rate at which data stored on a disk can be accessed.

24. The caching method of claim 23, wherein creating said cache comprises:

creating in said main memory a first name cache;

in response to an initial request to open a specified file nested in a path of one or more directories, accessing said disk and determining that directory entries and file entries do not contain said specified file;

storing in said first name cache a history of paths of said directory entries and said file entries that do not contain said specified file;

in response to a subsequent request to open said specified file, searching through said history of said first name cache to locate said directory entries and said file entries that do not contain said specified file; and

returning a response that said specified file is not contained on said disk.

25. The caching method of claim 20, further comprising:

updating said cache by removing a least recently used memory component identifier in accordance with a least recently used routine.

26. The caching method of claim 20, further comprising:

updating said cache by adding a most recently used memory component identifier in accordance with a most recently used routine.

27. The caching method of claim 20, further comprising:

updating said cache by adding a most frequently searched memory

component identifier in accordance with a most frequently searched routine.

28.　The caching method of claim 20, further comprising:

updating said cache by removing a least frequently searched memory

component identifier in accordance with a least frequently searched routine.

29.　The caching method of claim 20, further comprising:

updating said cache by updating said memory component identifier in

accordance with a user specified routine.

30.　The caching method of claim 20, wherein said cache is one of a negative cache of

memory component identifiers that are not associated with data in said storage device.

31.　The caching method of claim 30, wherein said negative cache comprises a predetermined

number of cache entries for storing a history of said memory component identifiers that

are not associated with data in said storage device.

32.　The caching method of claim 31, wherein said predetermined number of cache entries is

based on usage of said memory component identifier.

33.　The caching method of claim 30, wherein said negative cache comprises a percentage of

cache entries stored in a cache system of valid memory component identifiers.

34.　The system of claim 33, wherein said negative cache is used for storing a history of said

memory component identifiers that are not associated with data in said storage device.

35.　The caching method of claim 30, wherein the cache is further comprises a positive cache

of memory component identifiers that have been written to at least one storage device.

36.　The caching method of claim 20, further comprising:

determining if at least one memory component identifier has been accessed

by at least one of a plurality of computer processes.

37.　The caching method of claim 36, further comprising:

increasing the number of said memory component identifiers to be placed

into said cache if at least one memory component identifier has been accessed by

at least one of said plurality of computer processes.

38.　The caching method of claim 36, further comprising:

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decreasing the number of said memory component identifiers to be placed into said cache if at least one memory component identifier has been accessed by at least one of said plurality of computer processes.

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